

AMENDMENTS TO THE CLAIMS

Please replace all prior versions of the claims with the following claim listing:

Claims:

1-49. (Canceled)

50. (Previously Presented) A food conveyor system comprising:
a plurality of bases, each base supporting a serving of food;
a conveying system for automatically conveying the bases, the conveying system having a customer section and a food service section;

wherein the food service section includes:

an entry point receiving the bases from the customer section;
an exit point conveying the bases to the customer section;
a plurality of food processing conveyor paths extending between the entry point and the exit point;
means for diverting, at the entry point, each of the bases to one of the plurality of food processing conveyor paths; and
means for rejoining, at the exit point, the bases from the plurality of food processing conveyor paths;
wherein at least one food processing conveyor path includes means for adjusting the temperature of a serving of food on the at least one food processing conveyor path to a desired temperature.

51. (Previously Presented) The food conveyor system of claim 50, wherein one of the food processing conveyor paths is a bypass conveyor that conveys the bases directly from the entry point to the exit point.

52. (Previously Presented) The food conveyor system of claim 50, wherein one of the food processing conveyor paths is a heating path, and the means for adjusting the temperature includes means for heating food servings on the heating path.

53. (Previously Presented) The food conveyor system of claim 52, wherein the heating means comprises at least one of a conventional oven, a microwave oven, grill, steamer, and fryer.

54. (Previously Presented) The food conveyor system of claim 50, wherein one of the food processing conveyor paths is a cooling path, and the means for adjusting the temperature includes means for cooling food servings on the cooling path.

55. (Previously Presented) The food conveyor system of claim 54, wherein the cooling means comprises a cooler.

56. (Previously Presented) The food conveyor system of claim 50, further comprising a food removal track extending from the entry point, wherein the diverting means comprises means for diverting food servings to the food removal track for manual removal of the food servings from the food conveyor system.

57. (Previously Presented) The food conveyor system of claim 50, wherein each food processing conveyor path includes a buffer section for holding the bases until rejoined at the exit point by the rejoining means.

58. (Previously Presented) The food conveyor system of claim 50, wherein each base is individually electronically identifiable, the diverting means further comprising:

means for identifying each base and the type of food serving on the base; and means for determining the proper food processing conveyor path to which each base is to be diverted according to the identification of the base and the type of food serving on the base.

59. (Previously Presented) The food conveyor system of claim 58, wherein the determining means is a computer.

60. (Previously Presented) The food conveyor system of claim 59, wherein the diverting means further comprises at least one sensor for identifying the bases at the entry point, the at least one sensor relaying base identification information to the computer.

61. (Previously Presented) The food conveyor system of claim 59, wherein the customer section is divided into a number of customer stations, each customer station having at least one sensor, each sensor identifying the bases removed from the food conveyor system by the customer and relaying information of the identity of removed bases to the computer for billing purposes.

62. (Previously Presented) The food conveyor system of claim 61, wherein each customer station includes a customer screen for displaying the type and price of food servings moving on the food conveyor system across the customer station.

63. (Previously Presented) The food conveyor system of claim 62, wherein each customer screen includes option buttons for providing ordering, billing and other restaurant functions to the customer.

64. (Previously Presented) The food conveyor system of claim 63, wherein the computer is adapted to display predetermined information on the customer screen, the predetermined information selected from a group consisting of nutritional information, ingredients used, and food background information.

65. (Previously Presented) The food conveyor system of claim 59, further including a kitchen terminal located at the food service section of the food conveyor system, the kitchen terminal having sensors, a screen, and a keyboard,

wherein, in use, information regarding food servings introduced to the food conveyor system can be entered into the computer via the kitchen terminal.

66. (Currently Amended) A food management and inventory system for a sushi train restaurant, wherein a plurality of bases supporting food servings are conveyed along a closed loop conveyor having a customer section and a food service section, wherein each of the bases is individually electronically identifiable, wherein the food service section includes:

an entry point;

at least two food processing conveyor paths extending from the entry point, at least one of the food processing conveyor paths including means for altering the temperature of food servings on the conveyor path to a desired temperature;

means for diverting food servings at the entry point to one of the food processing conveyor paths; and

means for rejoining the food processing conveyor paths to each other at a food service section exit point that leads to the customer section;

wherein the food service section comprises at least one sensor at the entry point for identifying each base, the computer deciding to which of the food processing conveyor paths each base is to be diverted after identification of the base, the computer operating the diverting means to divert each base accordingly.

67. (Previously Presented) The system of claim 66, wherein the bases have an electronically identifiable tag comprising at least one of a barcode or radio frequency (RF) identification.

68. (Previously Presented) The system of claim 66, wherein the system includes a computer configured to receive information for each food serving introduced to the conveyor, the information including a base identification number and the type of food serving supported by the base.

69. (Previously Presented) The system of claim 68, wherein the system includes at least one sensor adjacent the conveyor, the at least one sensor identifying the bases currently on the conveyor and passing the identity of the bases to the computer for performing an inventory on the type and quantity of food servings currently on the conveyor.

70. (Previously Presented) The system of claim 68, further comprising: means for altering the temperature of food servings on the conveyor to a desired temperature; and

at least one sensor adapted to identify a base currently passing along the conveyor and to pass the identity of the base to the computer for identification of the food item on the base;

wherein the computer is further adapted to:

recall a predetermined preparation procedure for the food item;

direct the food item to the temperature altering means to bring the food serving on the conveyor to a desired temperature;

apply a predetermined preparation program to process the food item;

and

command the conveyor to send the food item into the customer section.

71. (Previously Presented) The system of claim 68, wherein the customer section is divided into a number of customer stations, each customer station having at least one sensor, each sensor detecting and identifying the bases taken by the customer from the conveyor and transmitting the identity of the food serving to the computer for customer billing purposes.

72. (Previously Presented) The system of claim 71, wherein each customer station has a customer screen for displaying information of the type and price of the food serving on the base identified by the at least one sensor.

73. (Previously Presented) The system of claim 72, wherein the customer screen is configured to display the type and price of all food servings taken by the customer.

74. (Previously Presented) The system of claim 72, wherein the customer screen is configured to display a current bill total for the customer.

75. (Previously Presented) The system of claim 71, wherein the at least one sensor sends food serving information for all food servings consumed by the customers to the computer for system inventory and for monitoring the type and amount of food servings being consumed.

76. (Canceled)

77. (Currently Amended) The system of claim [[76]] 66, wherein one of the food processing conveyor paths is a bypass conveyor where food servings, which do not require a temperature change, travel from the entry point directly to the exit point.

78. (Currently Amended) The system of claim [[76]] 66, wherein the computer:

receives the time of introduction of each base to the conveyor;
determines the exposure time for each particular food serving as being the time each food serving has been circulating on the conveyor; and
deciding to which of the food processing paths each particular food serving is to be diverted.

79. (Currently Amended) The system of claim [[76]] 66, wherein one of the food processing conveyor paths is a bypass conveyor that bypasses the temperature altering means, whereby food servings having a low exposure time can be diverted to the bypass conveyor.

80. (Currently Amended) The system of claim [[76]] 66, further comprising a removal track that extends from the entry point, wherein the diverting means diverts food servings having an exposure time higher than a predetermined time for that particular food serving to the removal track for manual removal of the food servings from the food service section.

81. (Currently Amended) The system of claim [[76]] 66, wherein one of the food processing conveyor paths is a heating path, the heating path including means for heating food servings on the heating path, wherein the diverting means diverts food servings that require re-heating to the heating path to increase the temperature of the food servings to a desired level.

82. (Currently Amended) The system of claim [[76]] 66, wherein one of the food processing conveyor paths is a cooling path, the cooling path including means for cooling food servings on the cooling path, wherein the diverting means diverts food servings that require re-cooling to the cooling path to lower the temperature of the food servings to a desired level.

83. (Currently Amended) The system of claim [[76]] 66, wherein the at least one sensor identifies the food servings on the conveyor and passes food serving identification information to the computer, the computer performing an inventory of the types of food servings on the conveyor, the quantity of each food serving, and which food servings are being depleted.

84. (Currently Amended) A food management and inventory system for a sushi train restaurant, wherein a plurality of bases supporting food servings are conveyed along a closed loop conveyor having a customer section and a food service section, wherein each of the bases is individually electronically identifiable;

wherein the system includes a computer configured to receive information for each food serving introduced to the conveyor, the information including a base identification number and the type of food serving supported by the base;

wherein the customer section is divided into a number of customer stations, each customer station having at least one sensor, each sensor detecting and identifying the bases taken by the customer from the conveyor and transmitting the identity of the food serving to the computer for customer billing purposes;

wherein each customer station has a customer screen for displaying information of the type and price of the food serving on the base identified by the at least one sensor; and

~~The system of claim 72,~~ wherein the customer screen includes option buttons which allow the customer to order specific food servings from the kitchen for preparation by kitchen staff, the customer screen alerting the customer when the specific food serving is approaching the customer station.

85. (Previously Presented) The system of claim 84, wherein the customer screen at other customer stations alert other customers that the specific food serving is a special order and is not available to them.

86. (Previously Presented) The system of claim 84, further comprising means for passing information to the computer when the customer takes the specific food serving from the conveyor.

87. (Currently Amended) A method of managing food supply and food inventory, the method comprising:

providing a system where food servings on bases are conveyed along an automated conveyor having a customer section and a food service section, wherein the bases are individually electronically identifiable;

entering information into a computer regarding each food serving introduced to the conveyor, the information including a base identification number and the type of food serving on the base;

using at least one sensor at the food service section to identify all the bases currently on the conveyor;

sending the information related to the identity of the bases currently on the conveyor to the computer; and

performing an inventory to determine the food servings currently on the conveyor and the food servings being depleted at the customer section;

determining type and exposure time of each food serving; and

re-heating or re-cooling food servings based on exposure time and food serving type.

88. (Previously Presented) The method of claim 87, further including:

instructing kitchen staff to prepare food servings based on food servings being depleted; and

introducing the food servings to the conveyor.

89. (Previously Presented) The method of claim 87, further including:

maintaining in computer memory a history of food serving depletion with respect to time of day, day of the week, month, and/or season;

determining anticipated food serving demand based on the history of food serving depletion for a similar time of day, day of the week, month, and/or season;

instructing kitchen staff to prepare amounts and types of food servings in anticipation of such demand.

90. (Previously Presented) The method of claim 87, further including: entering the time of introduction of each base to the computer; and using the computer to determine the exposure time for each particular food serving as being the time each food serving has been circulating on the conveyor.

91. (Previously Presented) The method of claim 90, further including: diverting food servings that have an exposure time higher than a predetermined time for that particular food serving to a designated area for manual removal.

92. (Canceled)

93. (Previously Presented) The method of claim 87, further including: advertising re-heated or re-cooled food servings to customers at a reduced price.

94. (Previously Presented) The method of claim 87, wherein the customer section is divided into a number of customer stations, the method further including:

identifying at each customer station bases removed by the customer from the conveyor; and

passing information related to the type and price of the food serving on the removed bases to the computer for billing and inventory.

95-98. (Canceled)